

REMARKS

The Office Action dated November 20, 2003 and the cited references have been carefully considered.

Status of the Claims

Claims 1-41 are pending. Claims 22-29 are withdrawn pursuant to an election made on June 3, 2003 by the Applicant's attorney. The Applicant reserves the right to file one or more divisional patent applications at an appropriate future date. Claims 30-41 were added in the Applicant's response dated September 10, 2003 and recite patentable subject matter already disclosed in the specification or original claims. Therefore, claims 1-21 and 30-41 remain the current prosecution.

Claim 32 is currently amended to remove extraneous language and to replace "oxygen-containing compound" with "iron (III) hydroxide."

Claims 30-41 Are Patentable Over Lush and Carr

The current Office Action requires Applicant to distinguish new claims 30-41 over Lush *et al.* (U.S. Patent 4,877,920; hereinafter "Lush") and Carr *et al.* (U.S. Patent 6,475,386; hereinafter "Carr"). Applicant respectfully submits that Claims 30-41 are patentable over the Lush and Carr references because neither reference alone, nor in a combination thereof, discloses, or suggests a carbon adsorbent or a method for making a carbon adsorbent for use in removing heavy metal anions from a liquid or gas and that has a BET surface area greater than about 100 m²/g that has incorporated therein iron (III) hydroxide, wherein the adsorbent is capable of interacting with anions of the heavy metal to lower a concentration of the heavy metal.

Lush discloses only the removal of arsine (AsH₃) or lower hydrocarbyl arsines (R_xAsH_{3-x}) from hydrocarbon fluids and inert gases using only CuO-containing activated carbon. Column 1,

lines 56. Arsine and hydrocarbyl arsines do not exist as anions of arsenic in Lush's reducing media such as hydrocarbon fluids (e.g, propylene; column 2, line 32) or inert gases (e.g, nitrogen; column 2, line 29). Instead, arsine and hydrocarbyl arsines are neutral compounds of arsenic. Moreover, Lush does not even disclose any method of making his carbon let alone the method recited in claims 35-39.

Carr discloses only oxidized carbon cloth for removal of cationic (positively charged) contaminants. Column 4, lines 26, and 36-38. Such an oxidized carbon is manufactured by treating a carbonaceous char with hydrochloric acid and sodium or calcium salts. The sodium or calcium salts were removed from the carbon after such treatment. *See* U.S. Patent Application 09/335,108 (now U.S. Patent 6,593,271) that is incorporated in Carr by reference.

In contradistinction, claims 30-39 recite an activated carbon comprising iron (III), which carbon has the property of removing anions (negatively charged) of heavy metals, and claims 40-41 recite an activated carbon that has the property of removing anions (negatively charged) of heavy metals.

Thus, neither Lush, nor Carr, nor a combination thereof discloses, teaches, or suggests each and every element of each of claims 30-41. Consequently, these claims are patentable over Lush and Carr.

In view of the above, it is respectfully submitted that the claims are patentable and in condition for allowance. Reconsideration of the rejection is requested. Allowance of claims at an early date is solicited.

Applicant would appreciate the courtesy of a telephone call should the Examiner have any questions or comments with respect to this response or the claim language for purposes of efficiently resolving same.

Respectfully submitted,

By



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